

# ARUBA



Lago Oil & Transport Co., Ltd.

Aruba, Netherlands Antilles

Vol. 42 — No. 3

April 1982

## Ambitious 1982 energy conservation program established

Lago has embarked on a very ambitious program to reduce refinery energy consumption in 1982. Lago refinery consumes about 6 million barrels of fuel a year and at current fuel oil prices, the incentive to improve efficiency is tremendous. In recent years, Lago's progress in energy conservation has been steady and has paralleled the average of Exxon refineries, but at a higher level of energy consumption relative to other refineries.

However, several new factors have led Lago to the decision to take a hard look at its program for energy conservation this year.

The most significant new factor resulted from the installation of fuel meters in 1981, which showed that the Company was consuming even more fuel than previously estimated. As of late 1981 Lago recognized the need to make a major organizational commitment to a stepped-up conservation program.

Lago took steps to develop an appropriate plan of action for 1982 by involving all of the operating departments in the development and execution of the plan. Process, Mechanical and Technical Departments committed to a plan of action that truly represents a stretch goal. Energy activities are being coordinated by the Encon/Combustion Section of the A&CS Division of the Technical Department.

The major portion of the improvement is to be accomplished through a combustion program which grew out of a 3-month visit of Mr. Merv Beckner late last year. He is an expert from Imperial Oil, the Exxon affiliate in Canada. Merv demonstrated that there was a need to reduce unburned fuel in the furnaces and boilers and reduce excess air and stack

temperature to make the biggest improvements in furnace and boiler efficiency.

Many of the changes required are minor modifications to burner tips and fuel atomization. This work is already proceeding.

In addition, the furnace sootblowing and decoking frequencies will be optimized to save steam, and we will try to seal furnace cabin air leaks.

The next part of the 1982 program consists of some operational steps, the biggest of which, excess air reduction, will be given a big boost by the combustion program. Also included here is shortened exchanger cleaning cycles and a big effort in the areas of steam trap replacement, steam leak minimization and installation of reusable insulation.

It should be pointed out that, in addition to setting a stretch target for saving fuel, our 1982 program includes plans, to maximize the amount of pitch in the refinery liquid fuel and minimize the amount of tar burned.

The cost savings that may be realized by maximizing pitch burning are great and it also helps us to minimize our RSFO production.

As a result of all this effort, Lago is predicting a steady decrease in its energy consumption continuing out to 1988. It should be noted further that most of the energy reduction forecasted over the next 2 years results from operational improvements. Beyond 1983 most of the further improvements are dependent on the timely implementation of the Energy Conservation projects.

To sum up, the current situation at Lago in the energy field is one of progress and improvement in efficiency, almost entirely through operational improvements and minor equipment modifications. To realize these efficiency improvements will require the full support and commitment of all Lago personnel.

## Programa ambicioso pa conserva energia den 1982 estableci

Lago a embarca riba un programa masha ambicioso pa reduci e consumo di energia den refinaria den 1982. E refinaria di Lago ta consumi 6 milyon di bari di zeta pa anja y na prijsnan actual di zeta, asina ta cu e incentiva pa mehora eficiencia ta tremendo. Den anjanan reciente Lago su progreso den conservacion di energia tabata constante y e ta pareu cu e promedio di e refinarianan di Exxon, pero na un nivel mas halto di consumo di energia compara cu e otro refinarianan. A pesar di esei diferente factornan mas nobo a conduci na e decision pa tira un bista analizante riba nos programa pa conserva energia e anja aki.

E factor nobo mas significante cu a resulta di e instalacion di e meternan di combustible den 1981 a demonstra cu e consumo di combustible di e Compania ta mas grandi cu a wordo calcula anteriormente. Na fin di 1981 Lago a reconoce e

necesidad pa mara su mes como organisacion na un programa di conservacion di energia den diferente etapa.

Lago a tuma medidanan pa desaroya un plan di accion apropia pa 1982 door di envolve tur e departamentonan di operacion den e desaroyo y ehecucion di e plan. E departamentonan Process, Mechanical y Technical a cometenan mes na un plan di accion cu berdaderamente representa un meta estrecho.

Actividadnan di energia a wordo coordina door di e seccion di Encon/Combustion di A&CS Division di e departamento Technico.

E parti mas grandi di e mehoracion mester wordo logra door di un programa di combustion cu a crece di e bishita di 3 luna di Sr. Merv Beckner anja pasa. E ta un experto di Imperial Oil, e afiliado di Exxon na Canada. Mervin a demonstra cu nos mester reduci e combustible cu no ta wordo kima den nos fornonan y boilernan y reduci e exceso di aire y e temperatura di "Stack" pa por logra e mehoracion mas grandi den eficiencia den forno y boiler.

Hopi di e cambionan requeri ta modificacionnan chiquito pa

(Cont. riba pag. 7)

**ARUBA**Lago Oil & Transport Co., Ltd.  
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Printer: Verenigde Antilliaanse Drukkerijen N.V.

## Exxon/EIA News Briefs

In the C.A.T. survey of last year Lago employees expressed their interest in hearing more about Exxon and EIA topics. In view of this interest Exxon/EIA news briefs will be included as a regular feature of this and coming issues.



C.C. Garvin, Jr.  
Exxon President



Archie Monroe  
EIA President

### EXXON FINANCIAL RESULTS (COMPARISON OF 1981 TO 1980)

Exxon Corporation has estimated net income for the year 1981 at \$5,565 million or \$6.43 a share, down 1.5% from the \$5,650 million and \$6.49 a share level in 1980.

The corporation's total 1981 revenue was \$114,989 million, compared to \$110,381 million in 1980. Net income in 1981 amounted to 4.8 cents per dollar of revenue, down from 5.1% in 1980.

The decrease in net earnings occurred in spite of much improved foreign exchange over 1980 experience. Considerable strengthening of the U.S. dollar resulted in net foreign exchange translation gains totaling \$698 million in 1981, up from \$194 million in the previous year. Operating earnings, which exclude foreign-exchange translation effects, were down 13.2%, to \$5,416 million in 1981.

### INCREASED ENERGY INVESTMENT

Notably, Exxon invested in capital and exploration expenditures - to provide future energy supplies for its customers - about twice what it made in net earnings. Worldwide capital and exploration expenditures totaled \$11,089 million in 1981, up 37.9% from the previous year.

In the U.S. alone, such expenditures totaled \$5,696 million, 51% of the worldwide total and 61% above the 1980 U.S. expenditures. As recently announced, 1982 capital and exploration expenditures are estimated at \$13,500 million, 22% above the 1981 total.

In another area worthy of note, Exxon's windfall profit tax alone for 1981 was \$2,119 million, up from \$595 million in 1980.

Exxon Chairman Cliff Garvin commented as follows on the company's operating earnings for 1981:

"In total, Exxon's 1981 operating results reflect the generally depressed market conditions which we have experienced in the petroleum and chemical industries since the first quarter of 1980.

The reduced demand for petroleum and chemical products, and resulting excess capacity in most phases of these industry operations, having continued to have a detrimental effect on Exxon operating earnings."

Speaking about operating comparisons by major components of the business, Garvin noted:

— In the U.S., exploration and production earnings of \$2,308 million in 1981 were up 8%. Average selling prices for Exxon-produced crude oil, natural gas and natural gas liquids were all higher than in the previous year. But the effect of the higher prices was offset by increased operating expenses and higher taxes.

*Petroleum operations are divided into "upstream" and "downstream" functions. The upstream end of the business deals with the developing of the raw materials and includes petroleum exploration and production. Downstream includes refining, product distribution and marketing.*

### DOWNSTREAM EARNINGS DECLINE

— Downstream profitability - earnings for petroleum refining and marketing operations - were \$85 million in the U.S. in 1981, down from \$202 million in the previous year. Petroleum product sales volume declined 14% and that, coupled with the inability to recover higher costs in the prevailing market, resulted in the lower earnings.

— Abroad, exploration and production earnings of \$1,912 million in 1981 were essentially on level with the previous year. But refining and marketing operations abroad fell 39% in 1981 to \$1,030 million.

— Chemical earnings, worldwide, were \$266 million in 1981, down 34% from 1980. Sales volumes declined 5%, reflecting soft markets worldwide. Most of the decline in earnings occurred in Europe and Canada, where margins were affected significantly by excess capacity and rising costs.

### MINERALS LOSE

— In the minerals segment, losses of \$43 million in 1980 increased to \$118 million in 1981, due to higher exploration and development costs and depressed market conditions in the copper business.

— Other operations incurred losses of \$113 million in 1981 as compared with \$37 million of losses in 1980. Most of the loss increase was in Exxon Office Systems Company and resulted from one-time costs associated with streamlining the organization and disposing of obsolete inventory.

Of Exxon Corporation's total expenditures for 1981, 88% went for energy-related projects - principally crude oil and natural gas. Chemical projects accounted for an additional 8% of the total expenditures.

## Esso Inter-America

### SIGNIFICANT OIL DISCOVERY IN COLOMBIA

In Colombia Intercol, an affiliate of Esso Inter-America, confirmed a significant oil discovery on the ARAUCA exploration block in the llanos east of the Andes. It was the first major new discovery in Colombia by any company over the last 18 years and involved the deepest drilling ever done in Colombia. The oil was found at depths of up to 19,200 feet, or approximately 3.5 miles, making in the deepest oil production discovered in South America. Development plans for the ARAUCA field include a feasibility study for a 170-mile pipeline to take the oil over the Andes mountains to the

(Cont. on page 5)

## Resumen di Exxon/EIA

Den e encuesta di Communications Action Team anja pasa, e empleadonan di Lago a expresa nan interes pa tende mas di topiconan di Exxon/EIA. En bista di e interes aki, noticianan en resumen di Exxon/EIA lo wordo inclui regularmente den e edicion aki y den otronan den futuro.

### RESULTADO FINANCIERO DI EXXON (1981 compara cu 1980)

Exxon Corporation a calcula su entrada neto di anja 1981 na \$5,565 miyon, \$6.43 pa accion, un reduccion di 1.5% di e \$5,650 miyon y \$6.49 pa nivel di accion na anja 1980.

E entrada total di e corporacion na 1981 tabata \$114,989 miyon, compara cu \$110,381 miyon na 1980. E entrada neto na 1981 ■ monta na 4.8 cen pa cada dollar di entrada, un reduccion di e 5.1% na 1980.

E reduccion den ganashi neto a tuma lugar, aunque e traslado di divisa mehora hopi compara cu anja 1980.

E dollar mericano a bira considerablemente mas fuerte resultando den e suma total di \$698 miyon di ganashi neto di traslado di divisa na 1981, un aumento di e \$194 miyon di e anja anterior. Ganashi di operacion, excluyendo e efectonan di traslado di divisa a baha cu 13.2%, y a bira \$5,416 miyon na 1981.

### AUMENTO DI INVERSION DEN ENERGIA

Notable ta cu Exxon a inverti den gastonan di capital y exploracion - pa suministra su clientenan cu energia pa futuro - como dos biaha mas di loke ela saca den ganashi neto.

Capital mundial y gastonan di exploracion ■ suma na un total di \$11,089 miyon na 1981, un aumento di 37.9% for di e anja anterior.

Den Estados Unidos so, e gastonan di e clase ey a monta na \$5,696 miyon, 51% di ■ total mundial y 61% riba e gastonan di E.U. na 1980. Manera a wordo anuncia recientemente e capital y gastonan di exploracion di 1982 ta wordo calcula na \$13,500 miyon, cual ta 22% riba ■ total di 1981.

Den otro area cu ta vale la pena pa menciona, Exxon su ganancia di impuesto so tabata \$2,119 miyon na 1981, un aumento for di e \$595 miyon na 1980.

Cliff Garvin, e presidente di Exxon, a comenta lo siguiente riba e ganashinan di operacion na 1981:

"En total, Exxon su resultadonan di operacion ta refleha e condicionnan di mercado generalmente desfavorabel cu nos a experiancia den e industrian petrolero y quimico den e prome trimestre di 1980. E demanda reduci pa petroleo y productonan quimico, cu tabatin como resultado un capacidad excesivo den mayoria di e fasenan di e operacionnan industrial aki, a sigi tin un efecto detrimental riba e ganashinan di operacion di Exxon."

Papiando riba comparacionnan di ganashi di operacion door di componentenan importante di ■ negoshi, Garvin ■ nota:

— Den E.U. ganashi di exploracion y produccion di \$2,308 miyon na 1981 a subi cu 8%. E averahe di e prijsnan di benta pa zeta crudo produci door di Exxon, manera gas natural y liquidonan saca for di gas natural, tur tabata mas halto cu e anja anterior. Pero e efecto di e prijsnan mas halto a wordo compensa door di aumento di gastonan di operacion y door di impuestonan mas halto.

*Operacionnan di petroleo ta dividi entre funcionnan di "upstream" y "downstream". E parti "upstream" di e negoshi aki ta trata cu e desaroyo di materialnan crudo y tambe ta inclui exploracion di petroleo y produccion. "Downstream" ta inclui refinamento, distribucion di producto y benta.*

### GANASHINAN "DOWNSTREAM" TA BAHA

— Ganashinan di "downstream" - ganashi di refinamento di

petroleo y di operacion di mercado - tabata \$85 miyon den E.U. na 1981, un rebaho di ■ \$202 miyon di e anja anterior. E cantidad di benta di produccion di petroleo a baha cu 14% y esey hunto cu e inabilidad pa recobra costonan mas halto den e mercado comun a resulta den menos ganashi.

— Den exterior, exploracion y ganashi di produccion di \$1,912 miyon na 1981 tabata esencialmente na nivel cu e anja anterior. Pero e operacionnan den exterior di refinamento y mercado a baha cu 39% den 1981 te na \$1,030 miyon.

— Ganashinan quimico mundialmente tabata \$266 miyon na 1981, un reduccion di 34% for di 1980. Cantidad di benta a baha cu 5% reflehando e "soft market" -nan mundialmente. Mayoria di e reduccion den ganashi a tuma lugar na Europa y Canada, na unda e margennan a wordo afecta significativamente door di capacidad excesivo y aumento di costonan.

### PERDIDA DEN MINERALNAN

— Den e area di mineral, perdida di \$43 miyon na 1980 a aumenta te cu \$118 miyon na 1981, debi na e costonan mas halto di exploracion y desaroyo y condicionnan di mercado desfavorabel den e negoshi di koper.

— Otro operacionnan a trece perdida di \$113 miyon na 1981 compara cu \$37 miyon na 1980. Mayoria di e aumento di perdida tabata den Exxon Office Systems Company y a resulta for di costonan - cu ta wordo hasi un biaha so - asocia cu drechamento di e organisacion y cu destruccion di inventario cu no ta den uso.

Di e gastonan total di 1981 di Exxon Corporation, 88% a bai pa proyectonan relaciona cu energia - especialmente zeta crudo y gas natural. Proyectonan quimico tabata responsabel pa e 8% adicional di gastonan total.

## Esso Inter-America

### DESCUBRIMIENTO IMPORTANTE DI ZETA NA COLOMBIA

Na Colombia, Intercol, un afiliado di Esso Inter-America, a confirma un descubrimiento importante di zeta den e bloque di exploracion di ARAUCA den e yanonan pariba di Andes. Esey tabata e di prome gran descubrimiento nobo na Colombia den e delaster 18 anjanan y a envolvi boramento di mas hundo cu a yega di wordo hasi na Colombia. E zeta a wordo hanja na 19,200 pia, of aproximadamente 3,5 miya hundo bao tera, y esey ta e produccion di zeta di mas hundo cu a wordo descubri na Sur America. Plannan pa desaroyo di terreno di ARAUCA ta inclui un estudio pa wak e posibilidad pa un tuberia di 170 miya hiba e zeta pa Barranca Oil Refinery pa nord di Bogota, pasanda riba e montanjanan di Andes.

### OTRO EXPLORACIONNAN NA BRAZIL, ARGENTINA

Estudianan sismico a ser continua na e area di EIA na e costa di Brazil, cu un barco navegando partinan di e rivier di Amazona y e rionan secundaria. EIA tambe a completa un estudio aeromagnetico den un area di mas o menos 25,000 miya cuadra na costa di Brazil pa yuda determina si e area ta merece un estudio mas alew. Sedco 472, un barco independiente di bora den awa hundo a cuminsa bora na un hundidad di 1,435 pia den awa na e partinan afo di Delta di Rio Amazona. Na Argentina 11 fuentenan exploratorio a wordo bora afo di e costa di Tierra del Fuego, den e parti sur di e pais. Descubrimientonan chiquito di zeta afo di e costa di Argentina no a wordo hanja adecuado pa exploracion comercial debi na ■ lugar: 120 miya afo di costa den 450 pia den awa.

### ACTIVIDADNAN DI CONSTRUCCION TA INTENSIVO DEN E PROYECTO DI CARBON NA CERREJON

Un caminda di 100 miya cu lo conecta ■ area di mina cu e waf lo wordo completa durante e siguiente lunanan como parti di e Proyecto di Carbon na Cerrejón, Colombia.

(Cont. riba pag. 4)





# Esfuerzo pa duna mas informacion

Como reaccion riba e resultadonan di e encuesta hasi door di Communications Action Team (CAT), esfuertonan ta wordo hasi pa satisfice e necesidadnan cu bo a expresa, pa hanja mas informacion riba e Compania y e industria di petroleo.

Pa hasi e esfuerso aki bira un exito, di awor kaba bo por hasi tur e preguntanan especifico cu bo tin pensa na Dial 3500 of scirbi e preguntanan na QUESTIONS, y mandele na oficina 175-A di G.O.B. Bo preguntanan lo ser contesta via e canal di comunicacion mas apropia, sea Esso News, Boletin, Bulletin Board, Dial 3500 of den e reunionnan di comunicacion venidero pa henter e Compania.



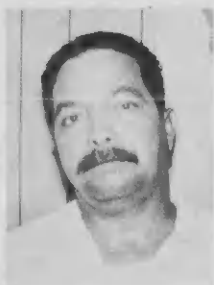
# Effort to fulfill need for more information

In response to the Communications Action Team (CAT) survey results, efforts are being made to fulfill your expressed need for more information about the Company and the oil business. To make this effort a success, you can start submitting from now on all specific questions you may have on your mind, through Dial 3500 or by writing to QUESTIONS, Room 175-A, G.O.B. Your questions will be answered through the most appropriate communication channel, be it Esso News, Boletin, Bulletin Board, Dial 3500 or in the upcoming Company-wide communication sessions.

## Service Milestones



Jean H.E. Baiz  
30 years



Benedicto Giel  
30 years



Jacobo R. Lampe  
25 years



David Moore  
30 years



Isidro Tiel  
30 years



Cristo R. Wernet  
30 years



Dr. Robert Goldstein teaching the COPE course to the participants.



New employees during their classroom training.



Presentation of the ICS diploma.

### Resumen di EXXON/EIA . . . *(Cont. di pag. 3)*

Morrison-Knudsen, un lider den construccion di mina a wordo selecta como e contractante principal pa disenja y construi tur e facilidadnan di e Proyecto di Carbon na Cerrejon, incluyendo e infraestructura pa yuda e proyectonan manera di waf, cas pa empleadonan y dos aeropuerto. Te awor aki, dos contrato pa bende carbon, cubriendo mas o menos 214 milyon di ton cuadra di entrega di carbon anual a wordo firma cu empresanan di servicio publico europeo na Denamarca y Irlanda.

# Sulphur: The yellow hills of Aruba



A vessel is loading sulphur at Lago Marine Terminal.

Sulphur has had a long and interesting history, and is one of the few elements that is found naturally in its relatively pure form. It has been well known for over 3,000 years.

Notwithstanding this long history, the uses to which sulphur has been put are relatively unsophisticated, at least in comparison to the well developed industrial chemistry based on elements such as carbon.

Nearly 90% of the uses for sulphur are as sulphuric acid and of this 60% is for fertilizer production. Within fertilizers, the main end products are phosphates with smaller volumes of ammonium thiosulphates.

Sulphuric acid is generally used industrially to recover valuable materials from their naturally occurring ores, or as a general industry process chemical such as in the bleaching of textiles, as sodium sulphide in photography and dye stuffs, as sulphur drugs in pharmaceuticals, as zinc sulphide in pigments, as lauryl sulphates in detergents, as a neutralizing or clean-up chemical in plating for the steel industry, and to decompose ilmenite to obtain titanium.

Non-acid uses such as vulcanization where sulphur is specifically introduced into a chemical structure in order to obtain a specific effect, represent a relatively minor part of overall sulphur consumption.

Apart from its small scale use in insecticides and fungicides, it is really only in the past 10 years or so that sulphur itself has gained recognition as an essential ingredient in the formation of amino acids for protein, and thereby plant and animal nutrition.

## LAGO'S SULPHUR: WHERE IT COMES FROM

Sulphur, as produced at Lago, is a by-product of the desulphurization process of oil. This process is part of the Lago Hydrodesulfurization Division (H.D.S.) Units. The H.D.S. has three parallel Sulphur Recovery Plants which were built to convert hydrogen sulfide gas (H<sub>2</sub>S) into elemental sulphur as a salable product.

The sulphur recovery plants were initially designed to produce 157 long tons of sulphur per stream day each of 99.5% minimum purity. Amine Regenerators (M1AR, M2AR, M3AR, FGS) units provide feed stock to Sulphur Plants.

The recovery of sulphur from the H<sub>2</sub>S gases is accomplished by the "Claus Process", which involves the combustion of a ratio of 2:1 of the H<sub>2</sub>S gas. In the feed to SO<sub>2</sub> and subsequent reaction of the remaining H<sub>2</sub>S with the SO<sub>2</sub> to form liquid sulphur and water vapours.

This reaction is catalyzed by activated alumina catalyst in the converters.

The first two plants, S1AR and S2AR, were constructed in the first phase of the HDS and S3AR in the second phase. As a result of the initial operation of S1AR and S2AR

modifications were made to the gas and air supply piping and control valves for the auxiliary burners at S3AR. In addition to the supply line changes, the catalyst type (Bauxite) was replaced with the activated alumina which develops a lower pressure drop in the unit. The result of these improvements was a production of 220 tons/day. Similar modifications have since been made to S1AR and S2AR and their respective capacity increased to 200 tons/day.

## STORAGE AND SHIPMENT

The liquid sulphur produced is stored in sulphur pits and, at a specified level, is transferred to the Sulphur Slaters where the liquid sulphur is cooled, and solidified with air, then water, on the slater belts.

The slated sulphur is transported to the sulphur pile by means of a yard conveyor and a stacker conveyor.

Bulk sulphur is loaded at Lago's Marine Terminal only at the H.D.S. berth, east of inner harbour. The sulphur is loaded from the pile in a loading hopper with a payloader and is transported by belt from the hopper to a chute above the vessel's holds. It is loaded at an average rate of about 250 metric tons/hour into the telescoping chute or spout. The swivel center of the chute is fixed and, therefore, to load different holds, the ships are shifted along the berth by means of warping with the assistance of tugs as necessary.

Cargoes loaded are generally in the range of 6,000 to 16,000 tons, however, there was one cargo of 28,000 tons loaded several years ago.

Sulphur vessels are scheduled by Exxon Chemical Supply Co. in Florham Park, with coordination from Exxon Chemical Americas (in Houston) and Lago.

## WHERE DOES LAGO'S SULPHUR GO?

The major portion of Lago's sulphur production is shipped under term contracts to Tibras Titanio Do Brasil and Sulfabcia Sulfoquimica de Bahia. Tibras manufactures sulfuric acid which they react with ilmenite to recover titanium which is then converted into titanium dioxide for the paint industry. Sulfab also produces sulfuric acid which they sell to industrial and fertilizer producers.

Our Colombian sulphur customer, Monomeros Colombo Venezolanos S.A. produces oleum and virgin sulfuric acid which they use in the manufacture of fertilizer as well as caprolactam/nylon.

EXXON/EIA News Brief . . . (Cont from page 2)

Barranca Oil Refinery north of Bogota.

## OTHER EXPLORATIONS IN BRAZIL, ARGENTINA

Seismic studies were continued on EIA's onshore acreage in Brazil with a vessel navigating parts of the Amazon River and its tributaries. EIA also completed an aeromagnetic survey on about 25,000 square miles of onshore acreage in Brazil to help determine whether any of the area merits further study. The Sedco 472, a self-positioning deepwater drillship, began drilling in 1,435 feet of water on the outer part of the Amazon River Delta. In Argentina 11 exploratory wells were drilled offshore Tierra del Fuego in the southern part of the country. Small offshore oil discoveries in Argentina were deemed noncommercial due to their location: 120 miles from shore. In 450 feet of water.

## CONSTRUCTION ACTIVITY ON CERREJON COAL PROJECT HEIGHTENS

A 100-mile road that will connect the mine area to the port will be completed during the next few months as part of the Cerrejon Coal Project in Colombia. Morrison-Knudsen, a leader in mine construction was selected as the prime contractor to design and construct all facilities of the Cerrejon Coal Project, including the supporting infrastructure of port, railroad, employee housing and two airports.

Up to now, two coal sales contracts, covering about 214 million metric tons of annual coal deliveries, have been signed with European utilities in Denmark and Ireland.

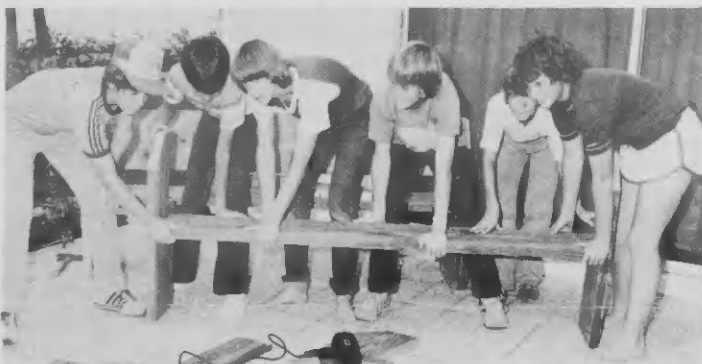
# Padvindernan a yuda juventud di YMCA como parti di e proyecto di Eagle Award

Den nan celo pa bira Eagle Scouts, cual ta e rango di mas halto den Padvinderij di Merca, Frank Goley y Steven Schuld a dedica casi dos luna di nan tempo liber na yuda e juventud di YMCA, San Nicolas.

Frank ta jiu di Gene Goley, Division Superintendent di General Services y Steven ta jiu di Norman Schuld, ex-Vice Presidente di Compania. Ambos mucha homber tin 14 anja.

Frank a dicidi di sinja e muchanan di YMCA con pa hunga futbol. "Ami ta hungando futbol di tempo cu mi tabatin cinco anja, y mi sa hopi di e deporte. E muchanan di YMCA nunca a hunga futbol antes, asina ta cu mi kier a duna nan un chens pa wak con beneficoso e deporte ta."

Steven a bisa cu ela wak rond na YMCA y ela ripara cu basta cos mester a wordo drecha. "E ora mi a dicidi di desaroya un proyecto pa reconstrui y verf e schommelnan y wipnan, verf e corridor principal y e linjanan di e cancha di basketball y volleyball y traha bankinan pa e auditorio di YMCA."



Steven Schuld, na banda drechi, ta trahando un banki cu ayudo di otro Padvindernan.

Asina ta cu e dos mucha hombernan a cuminsa un tarea ambicioso, y cu a tuma hopi tempo, esta di programa exactamente kiko nan kier logra. Nan a calcula cuanto tempo nan lo dedica na e proyecto tur siman, cuanto placa nan tin mester y cuanto mucha homber di YMCA lo participa. Tambe nan a bishita algun tienda pa busca e materialnan cu nan mester y nan prijsnan. Nan a scirbi cartanan na negoshinan pa hanja donacion y nan tabatin hopi exito. E donacionnan a cubri tur gastonan necesario manera e palo pa e bankinan,

verf, uniform pa futbol, balanan di futbol y tur otro gastonan envolvi.

Diestres mucha homber di YMCA entre 8 pa 11 anja a participa den e programa di entrenamiento di futbol na e tereno di futbol di Lone Palm. "E proyecto aki a hasimi un persona mas responsabel. Mi mester e sinja con pa yega na mente di e muchanan joven, y tambe con pa hasi pa nan comprendemi mihor." Frank a yega di atende campamento di futbol y di otro deportenan y tabata tin confiansa pa conseha e coachnan cu ela scoge, kendenan tur tabata mucha hombernan cu ta hunga den e team di futbol di Seroe Colorado. "Mi tabata kier pa e coachnan yuda e mucha hombernan desaroya un bon relacion entre nan mes y tambe pa sinja nan e valor di ser un bon deportista. M'a hanja hopi ayudo di Sr. William Rankin, nos lider di Padvinderij, kende tabata mi consehero tambe. E tabata tira un bista durante nos entrenamiento y comparti su ideanan cumi."

Steven tabatin cinco mucha homber di YMCA cu tabata traha cune continuamente y cu a sinja algun di e habilidadnan tecnico cu Steven e usa den e construccion di e bankinan y den verfmento. "Mi ta sintimi hopi bon. Mi ta gusta yuda hende y e muchanan a traha cu smaak." Steven tambe e hanja hopi ayudo di e otro padvindernan ora cu ela construi e bankinan na cas di su mayornan. Pa por muestra exito di su proyecto Steven e saca potret di YMCA Club prome cu ela cuminsa cu e proyecto y despues cu ela wordo completa. Y e Club e keda muestra hopi bon despues.

Frank y Steven ta gradeci cu e ayudo cu nan a ricibi di YMCA y di e padvindernan, pasobra esaki a contribui na e realizacion di e proyecto. Ademá di a yuda e juventud y tambe e comunidad cu nan proyecto, nan a gosa di nan trabow. "E mucha hombernan ta hopi talentoso. Mi ta spera cu YMCA lo cuminsa cu nan mesun team di futbol. Mi lo wak rond pa mira si tin un otro team cu lo por hunga cu nan y por ta nan por forma un grupo di diferente team cu por hunga contra otro regularmente," Frank a bisa.

"Mi ta kere cu ta hopi emocionante pa participa den e proyecto aki. Un den kada tanto mucha ta bira un Eagle Scout. Mayoria di e astronautnan y presidentnan tabata un Eagle Scout. Tambe e por yudabo ora bo aplica pa skolnan," Steven a bisa.

Tur dos tabata di acuerdo cu birando un Eagle Scout, nan lo por desaroya mas nan capacidnan como lider y aumenta nan sentido di responsabilidad, nan espirito di padvinder y nan habilidadnan. Ta comprendibel anto cu Frank y Steven ta sperando seriamente cu pronto nan lo wordo notifica cu nan a gana e Eagle Award.

## Boy Scouts helped YMCA youth as part of Eagle Award project

In their zeal to become Eagle Scouts, the highest rank of Boy Scouts of America, Frank Goley and Steven Schuld dedicated almost two months of their spare time to helping the youth of the YMCA, San Nicolas.

Frank is the son of Gene Goley, Division Superintendent of General Services, and Steven is the son of Norman Schuld, ex-Vice President of the Company. Both boys are 14 years of age.

Frank decided he would teach the kids of the YMCA how to play soccer. "I've been playing soccer since I was five or so and I know a good deal about the sport. The kids at the YMCA never played soccer before there, so I wanted to give them a chance to see how rewarding the sport is."

Steven said he looked around at the YMCA and saw that quite a few things needed repairing. "So I decided I would develop a project to reconstruct and paint the swings and seesaws, paint



Frank Goley, third from right, supervising the soccer practice at Lone Palm.

the main corridor and the lines of the basketball and volleyball courts, and to build benches for the YMCA auditorium."

So the two boys embarked on the time consuming and ambitious task of programming exactly what they wanted to accomplish. They estimated how much time they would spend on the projects each week, how much money they needed and how many YMCA boys would be participating. They visited



# Azufre: E ceronan geel di Aruba



Sylvio Cijntje ta inspecta e azufre na e faha di e hopper.

Azufre tin un historia largo y interesante y e ta uno di e poco elementonan cu ta wordo hanja den su forma relativamente puro. E ta conoci pa mas di 3000 anja.

Apesar di su historia largo, azufre ta wordo usa relativamente simpel, lo menos compara cu e industria quimico bon desaroya cu ta basa riba elementonan manera carbon.

Casi pa 90% azufre ta wordo usa manera azufre acido y di esaki 60% ta pa produccion di kunstmest. Loque ta concerni kunstmest y productonan final mas importante ta fosfaat cu cantidad mas chikito di amonium thiosulphates.

Azufre acido ta wordo generalmente usa industrialmente pa recobra materialnan valioso di nan mineral natural of como un proceso quimico di industria en general manera den tinjamento di textiel, manera sodium sulfide den fotografia y pa tinja material manera droga di sulpha den productonan farmaceutico, manera zinc sulphide den pigment, manera "lauryl sulphates" den detergente, manera neutralisador of quimico di limpieza of pa cubri cu hero den industria di hero y pa descomponer ilmenite cu bo ta hanja di titanium.

Usonan cu no ta acido manera vulcanisacion, unda azufre ta wordo especialmente introduci den e structura quimica pa por hanja un efecto special, ta representa un parti relativamente chikito den e totalidad di consumo di azufre.

Fuera di su uso na escala chikito den insecticidanan y "fungicides" ta asina cu ta realmente durante e ultimo 10 anjanan so cu azufre a wordo reconoci como un ingrediente esencial den e formacion di acidonan amino pa proteina y tambe pa mata y cuminda di bestia.

## LAGO SU AZUFRE - DI UNDA E TA BINI?

Azufre manera e ta wordo produci na Lago ta un producto secundario di e proceso unda e azufre ta wordo saca di e azeta. E proceso aki ta forma parti di e Unidadnan di e Division di Hydrodesulfurization (H.D.S.) di Lago E.H.D.S. tin tres planta paralelo pa recobra azufre cu a wordo construi pa converti "hydrogen sulfide gas" (H<sub>2</sub>S) den azufre elemental como un producto vendibel.

E plantanan pa recobra azufre a wordo inicialmente disenja pa produci 157 tonelada di azufre pa linja di produccion pa dia cada un pureza minimo di 99.5%. E unidadnan di Amine Regenerators (M1AR, M2AR, M3AR, FGS) ta provee e combustibel necesario pa e plantanan di azufre.

E recobramento di azufre di e gasnan H<sub>2</sub>S ta wordo logra door di e "Claus Process", cu ta involvi e combustibel na un ratio di 2: 1 di e gas H<sub>2</sub>S den e combustibel pa S<sub>2</sub>O y e reaccion siguiente di e H<sub>2</sub>S cu ta keda cu e SO<sub>2</sub> pa forma azufre liquido y vapor di awa.

E reaccion ta wordo catalisa door di activa e "alumina catalyst" den e convertidornan.

E prome dos plantanan, S1AR y S2AR a wordo construi den e prome fase di H.D.S. y S3AR den e segundo fase. Como resultado di e operacion inicial di S1AR y S2AR modificacionnan a wordo hasi na e tuberia cu ta provee gas y aire y na e "control valves" pa e fornonan auxiliar na S3AR. Adicionalmente na e cambionan na e linjanan di provision, e loke a causa cu e presion a baha den e unidad. E resultadonan di e mehoracionnan aki tabata un produccion di 220 tonelada pa dia. Modificacionnan similar a wordo haci desde e tempo ei na S1AR y S2AR y nan capacidad respectivo a crece na 200 tonelada pa dia.

## DEPOSITO Y CARGAMENTO

E azufre liquido produci ta wordo deposita den e deposito di azufre caba den tera, na un nivel especifico, e ta wordo transferi pa e "Sulphur Slaters" unda e liquido ta wordo fria y hasi solido cu aire y despues cu awa riba faha di transporte. E azufre den forma di plaatchi ta wordo transporta pa e monton di azufre pa medio di un transportador cu ta montona e azufre y tirele riba e monton.

Azufre den cantidad grandi ta wordo carga na Lago solamente na e lugar di ankra di H.D.S. pariba di e haaf aden. E azufre ta wordo carga di e monton den un "loading hopper" cu un "payloader" y ta wordo transporta pa medio di e faha di e hopper pa e "chute" cu ta tire den e bodega di e barco. E ta wordo carga na un average di mas o menos 250 tonelada metrico pa hora den e bodega via telescoop. E centro di e soporto ta mara y pesei pa por carga diferente bodega e vapor di e barconan ta wordo movi a lo largo di e lugar di traca pa medio di reparticion cu e asistencia di e remolcadornan manera ta necesario. Ta wordo carga en general na un cantidad di 6,000 pa 16,000 tonelada, aunque tabata tin un cargamento di 28,000 tonelada varios anja pasa. E barconan di azufre ta wordo programa door di Exxon Chemical Supply Co., na Florham Park, cu asistencia di Exxon Chemical Americas (na Houston) y Aruba.

## UNDA LAGO SU AZUFRE TA BAI?

E major porcion di e produccion di azufre di Lago ta wordo transporta pa barco bao contratonan pa cierto periodo pa Tibras Titanio Do Brasil y Sulfabcia Sulfoquimica de Bahia. Acido azufre di fabricacionnan di Tibras cu nan ta pone reacciona cu ilmenite pa hanja titatium, cu despues ta wordo converti den titanium dickide pa e industria di verf.

Sulfab tambe ta produci azufre acido cu nan ta bende cu productornan industrial y di kunstmest. Nos cliente Colombiano di azufre, Monomeros Colombo Venezolanos S.A. ta produci oleum y azufre acido original loke ta wordo usa pa fabricacion di kunstmest caprolacta/nylon.

Programa ambicioso . . .

(Cont. di pag. 1)

"burner tips" y atomisacion di e combustible. E trabao aki ta progresando caba. Adicionalmente lo mester optimalisa e frecuecianan pa limpia e forno y pa saca e carbon pa asina spaar "steam". Tambe lo trata di ceya e leknan di e cabina di forno.

E siguiente parti di e programa di 1982 ta consisti di algun pasonan operacional, di cual esnan di mas grandi ta e reduccion di aire, loke ta un empuhe grandi pa e programa di combustion. Tambe ta inclui aki den un ciclo di limpieza di "exchanger" cu ta mas cortico y un esfuerzo grandi pa reemplaza e "steam trap" pa minimalisa e leknan di "steam" y pa instala e insulacion cu por wordo usa di nobo.

Mester wordo indica cu adicionalmente fuera di ta pone un meta estrecho pa spaar combustible, e programa pa 1982 ta inclui plannan pa maximalisa e cantidad di pitch den e combustible liquido di refineria y minimalisa e cantidad di e "tar" cu ta wordo kima.

E reduccion di gastos cu por wordo realiza door di maximalisa e kimamento di pitch ta grandi y tambe e ta yuda pa minimalisa e produccion di R.S.F.O.

Como resultado di tur e esfuerzonan aki Lago ta predecir un reduccion constante den e consumo di energia di Lago cu lo continua te 1988. Ta bon pa nota ademas cu mayoria di e reduccion di energia predecir pa e dos anjanan cu ta bini ta resulta di e mehoracion di operacion. Despues di 1983 mayoria di e mehoracion den futuro lo depende di si e projectonan pa conserva energia, lo wordo implementa na tempo.

Mihor bisa, e situacion actual na Lago den e tereno di energia ta uno di progreso y mehoracion di eficiencia cu por wordo logra casi completamente pa medio di mehoracionnan di operacion y modificacionnan di equipo chiquito. E realisacion di e mehoracion di eficiencia aki ta requeri e sosten y aporte completo di tur empleadonan di Lago.

# Congratulations, Champions! Pabien, Campeonnan!



## Hubert Richardson won Mini-Marathon

Hubert Richardson, 55 years of age, has been running daily since 1966 and has

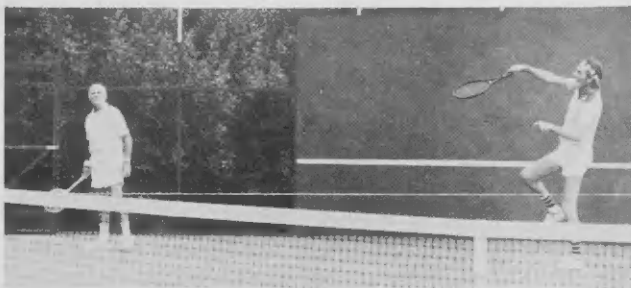
participated in over twenty races since. And he is getting better with every race: this year he broke his own last year's record with six minutes and six seconds (he ran 30 km in two hours, 36 minutes and 31 seconds). How does he do it? It is a daily affair, and requires extra preparation before the race. For four weeks prior to the marathon, Hubert ran at least one hour to one hour and a half per weekday and two to three hours during the weekends. He stopped with his normal diet three days before the race and started eating lots of spaghetti, macaroni, fruits and vegetables, and drank plenty of orange juice and "gatorade". During those three days he also abstained from alcohol and running, and made sure he got a generous amount of rest. The result? A first prize trophy.



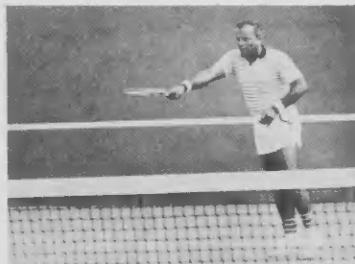
L. to r.: Jacinto Werleman, Hubert Richardson and Padu Maduro.

Jacinto Werleman y Hubert Richardson di Controller's Department, y Padu Maduro di Industrial Security Department, tabata finalistanan den e Segundo Mini-Marathon Internacional di Aruba di 30 km den e categoria di Cincuenta Anja of Mas. Hubert a gana e prome premio den e categoria aki.

## Lago won Esso/Shell Tennis Tournament

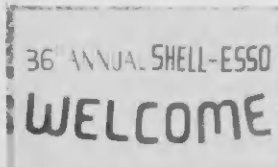


1



2

- 1 P. Storey and P. Nord (Lago)
- 2 R. Farro (Lago)
- 3 W. Diaz (Lago)
- 4 Wim Diza (team capt. Lago) and Per Nord, E. Leito (team capt. Shell) and W. Lambertin
- 5 Mrs. M. Fernan and Mrs. C. Beaujon (Shell)



3



4



5

### Boyscouts . . .

(cont. from page 6)

stores to look for the materials needed and their prices. They wrote letters to businesses for donations and were quite successful. Donations covered all necessary expenses such as wood for the benches, paint, uniforms for soccer, soccer balls and all other expenses involved.

Thirteen boys from the YMCA between the ages 8 to 11 participated in the soccer training program at the Lone Palm soccer field. "This project has made me a more responsible person. I had to learn how to reach young people's mind, how to get them to understand me better." Frank had attended soccer camps and all-sports camps and thus felt confident in advising the coaches he chose, who were boys from the Seroc Colorado soccer team. "I wanted the coaches to help the boys to develop a good relationship between themselves and to teach them the value of sportmanship. I got a lot of help from Mr. William Rankin, our scoutleader, who was my advisor. He checked around during the practice and shared his ideas with me."

Steven had five YMCA boys who worked with him steadily on his project and thus learned some of the technical skills Steven employed in building the benches and in painting. "I

feel great. I love helping people and the kids enjoyed working." Steven also got a lot of help from the other boy scouts when he built the benches at his parents' house. To measure the success of his project Steven took pictures of the YMCA Club before the project was started and after it was completed. And it looked pretty good afterwards.

Frank and Steven were grateful for the help they received from the YMCA and the boy scouts, for it contributed to the realization of their projects. Besides the fact that they helped the youth and so the community with their projects, they enjoyed doing the work. "The boys are very talented. I hope the YMCA starts with their own soccer team. I will look around and see if there's any other team that could play with them and maybe they could even get into a league," Frank said. "I think it's a great thrill to participate in this project. One in quite a few become an Eagle. Most astronauts and presidents have been an Eagle Scout. It also helps you when you apply to get into schools," Steven said.

They both agreed that becoming an Eagle Scout would further the development of their leadership capabilities, and increase their sense of responsibility, scout spirit and skills. No wonder Frank and Steven are earnestly hoping they will soon be notified that they have won the Eagle Award.